

DPIPWE currently monitors pesticides in only four rivers during significant rainfall events; the Duck, George, Little Swanport, and Esperance Rivers. The sampling uses automated sampling devices (usually 12 bottles per sampling episode).

Baseline monitoring of 54 catchments (initiated in 2005) has so far detected pesticides in seventeen of these rivers.

As a media release by Minister Llewellyn

(<http://www.media.tas.gov.au/release.php?id=24330>) (DPIW) in July 2008 so clearly articulated: “...we would prefer not to see herbicides detected at all.....the (current pesticide monitoring) program is not designed to provide early warning of events in particular locations and it cannot do that because, as is the case with these detections, there is often a considerable time lapse between sampling and finalising of water analysis.”

Nonetheless the media release also states: “The water monitoring program is designed to indicate the nature and extent of any water contamination from pesticides and to inform the community.”

I would argue strongly that it does not, and cannot do so.

As the community audit (Risk Awareness and Incident Response Capability in Water Catchments in North Eastern Tasmania, Australia - published in April 2007 by the Break O'Day Catchment Risk Group (BODCRG) (link to audit )

explains, quarterly monitoring, of 19 pesticides in raw river water at the bottom of 54 river catchments, along with ad hoc flood event monitoring of 4 rivers, cannot - when unrelated to pesticide application or catchment characteristics and use - “indicate the nature and extent of any water contamination from pesticides.

The Director for Public and Population Health in Tasmania (Dr Roscoe Taylor) cogently argued in his 2008 Annual Report - Drinking Water Quality (Microbiological) of Public Water Supplies in Tasmania (July 2006 to June 2007)

([http://www.dhhs.tas.gov.au/\\_data/assets/pdf\\_file/0006/45546/Annual\\_drinking\\_water\\_quality\\_report\\_2007-08\\_Final.pdf](http://www.dhhs.tas.gov.au/_data/assets/pdf_file/0006/45546/Annual_drinking_water_quality_report_2007-08_Final.pdf)) the rationale for adequate monitoring if that was to be the means of ensuring the safety of the water.

St Helens drinking water did not comply with the current drinking water standards even for microbiological testing and compliance. (see Break O'Day Council with regard to the above report)

At present, apart from the seemingly obvious evidence of contaminated water such as dead fish or animals that drink that water, there are no indicators of polluted raw drinking water supplies. To paraphrase Dr Taylor and apply his own logic to pesticide monitoring: “ the determination of the compliance of the drinking water supply system is dependent on the collection of sufficient samples as insufficient monitoring can result in periods of time when the water may be contaminated but the monitoring program would not detect such occurrences.”

All water users including those who irrigate food crops and feed their animals are also at risk from the adverse effects of water contamination.

Until the pesticides used in the catchments are documented (what, how much, and when applied and for how many years), along with the documentation of the catchment topography, including all water sources and rainfall events, then there can be no confidence in the nature and extent of any water contamination or the safety of drinking water supplies. Using the Pesticide Impact Rating Index (PIRI) tool validated to Tasmanian conditions by DEH, CSIRO, UTAS and DPIW

(<http://www.clw.csiro.au/research/biogeochemistry/organics/projects/piri.html>) will not assist with what has happened historically in catchments and provide the load of pesticides already used, and is only one minor aspect of a risk management approach to catchment use.

The Tasmanian River Catchment Water Quality Initiative (<http://www.dpiw.tas.gov.au/inter.nsf/WebPages/SSKA-7JA425?open>) finished in September 2008 with four publicly available reports. However large data gaps are evident, including the total amount of pesticides used in Tasmania and in which catchments.

Communities need to be involved with their river catchments and drinking water management plans and until there is genuine community engagement regarding these issues then there can be no confidence in the drinking water quality.

Water taken from the George River cannot be guaranteed to be non-contaminated at all times (DPIW has detected 2,4-D, MCPA and metsulfuron-methyl) (<http://www.dpiw.tas.gov.au/inter.nsf/WebPages/CART-69STWK?open#MonitoringResults>) and a prudent approach would be to use water filters for the supply of drinking water. It can be argued that such risk management practices should be applied to all drinking water sources in Tasmania.

It should be recommended that adequate water filters, such as reverse osmosis and activated charcoal filters, should be installed at the water treatment plant prior to the water being stored in reservoirs.

How much drinking water costs, its degree of pollution and the urgent need for filters to ensure that the drinking water supply is safe and non-toxic at all times is certainly of concern to all water users.